

531622

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
6 May 2004 (06.05.2004)

PCT

(10) International Publication Number
WO 2004/038118 A1

(51) International Patent Classification⁷: E04B 2/86 [CA/US]; 20220 Cardinal Drive, Strongsville, OH 44136 (US). BJORKE, William, M. [US/US]; 2122 Middleton Road, Hudson, OH 44236 (US).

(21) International Application Number: PCT/US2003/032467

(22) International Filing Date: 14 October 2003 (14.10.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 60/419,469 18 October 2002 (18.10.2002) US

(71) Applicant (for all designated States except US): POLYONE CORPORATION [US/US]; 33587 Walker Road, Avon Lake, OH 44012 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): FOELL, David, S.

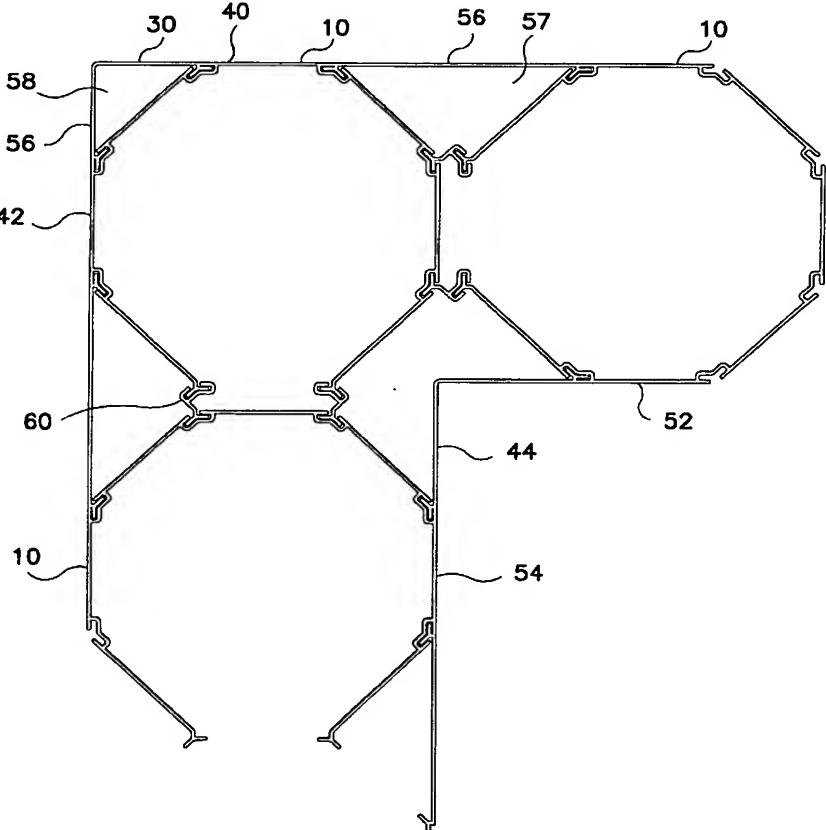
(74) Agents: HORNICKEL, John, H. et al.; Polyone Corporation, 33587 Walker Road, Avon Lake, OH 44012 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,

[Continued on next page]

(54) Title: INSERT PANEL FOR CONCRETE FILLABLE FORMWORK WALL



(57) Abstract: A formwork assembly is adapted to receive concrete to produce structures such as wall structures. The formwork includes PVC tubular form elements having recessed female engagement portions. The female engagement portions are adapted to receive respective male engagement portions. An octagonal form element has a female engagement portion positioned at each vertex between adjacent sides. A recessed female engagement portion is closed to the interior of the form element but open to the exterior of the form element. Thus, the form element includes a plurality of vertices open to the exterior. The form elements also include male engagement portions at an open side. Wall panels, corner panels, and joint connectors can also include the male engagement portions. The male engagement portions and female engagement portions are adapted to mate to form a formwork arrangement having a substantially flat exterior wall. A formwork assembly can additionally include concrete flow apertures and insulation.

WO 2004/038118 A1



SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU,*

TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

- *of inventorship (Rule 4.17(iv)) for US only*

Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.